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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,618	11/29/2000	Ikuro Takekawa	1924.64869	9519
24978	7590	01/10/2005	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			NGUYEN, SIMON	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/725,618	Applicant(s) TAKEKAWA ET AL.	
	Examiner SIMON D NGUYEN	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (5,987,334) in view of Donahue et al. (5,835,721).

Regarding claim 1, Kaku discloses communication controller which selects one out of a plurality of radio communication lines and performs communication using the selected line, said communication controller comprising (abstract, figs. 1-3): a plurality of connection units (Ni...Ni), wherein one connection unit is connected to each one of said radio communication lines (fig.1-3); a radio-field-intensity acquisition unit (monitoring unit) which acquires a radio field intensity of each of said radio communication lines (column 3 lines 1-3, 40-67, column 4 lines 1-5); a selection unit which selects one of said connection units whose radio field intensity is equal to or higher than a threshold; a control unit which provides a control to perform data communication using said connection unit selected by the selection unit and said radio communication line corresponding to said selected connection unit (column 4 lines 6-22); and a mounted-state monitoring unit which monitors the mounted state of said connection units, wherein, based on the result of monitoring the mounted state of said

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connection units by said mounted-state monitoring unit, said control unit connects said selected connection unit to said radio communication line corresponding to said selected connection unit only when said selected connection unit is mounted (column 4 lines 6-22). However, Kadu does not specifically disclose the step of reconnecting the line to continue the data communication.

Donahue, in the same field of invention, discloses a method for resuming transmission data after the system reconnecting an interrupted link (abstract, column 10 lines 58-67). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Kaku, modified by Donahue to continue transmission/reception the remaining of data communication in the same line which is a potentially less time than to retransmit whole data again on a new line.

Regarding claim 3. Kaku further discloses wherein if data communication is established using one connection unit and corresponding radio communication line and if there is an interruption in this data communication, then said control unit connects other connection unit and corresponding radio communication line and resumes the interrupted data communication (column 4 lines 15-22, 64-67).

Regarding claim 4, Kaku further discloses wherein if data communication is established with one communication counterpart terminal and if there is an interruption in this data communication, then said control unit performs data communication with other communication counterpart terminal (column 4 lines 6-22, 52-67).

Regarding claims 5, 7-8, these claims are rejected for the same reason as set forth in claims 1, 3-4, respectively, wherein a computer readable recording medium

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having a control program to be used for selecting, controlling multi-lines is inherently in the system.

Response to Arguments

3. Applicant's arguments with respect to resume data transmission after reconnecting an interrupted link, this limitation has been disclosed by Donahue as cited above in the claimed rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson et al. ((6,477,139), in the same field of invention, discloses a controller management for data transmission in which the controller resumes data transmission after reconnecting an interrupted link (column 11 lines 55-60); Turina (5,784,362) discloses the step of resuming data transmission after reconnecting the link (column 11 line 47-60, column 12 lines 26-30).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

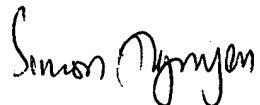
Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

1/5/05

A handwritten signature in black ink that reads "Simon Nguyen". The signature is written in a cursive, flowing style.